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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,981

01/12/2007

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1340-049

9344

7590 11/24/2009
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EXAMINER

BERHANU, SAMUEL

ART UNIT

PAPER NUMBER

2858

MAIL DATE

DELIVERY MODE

11/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,981	Applicant(s) BEGHELLI, GIAN PIETRO	
	Examiner SAMUEL BERHANU	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-10 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-10 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 9/03/2009 has been entered.

Response to Amendment

2. This is in response to an amendment/response filed on 09/03/2009

Claims 1-2,5-10 and 14-20 are currently pending.

Claim 1 is amended.

Claims 3-4 and 11-13 are cancelled.

Claim 20 is added

Claim Objections

3. Claims 1-2, 5-10 and 14-19 are objected to because of the following informalities:

Claim 1 contains grammatical error in line 6, "wherein each pack of batteries (5) of batteries (6) contains batteries". It should be written as "wherein each pack of (5) batteries contains batteries (6). Appropriate correction is required.

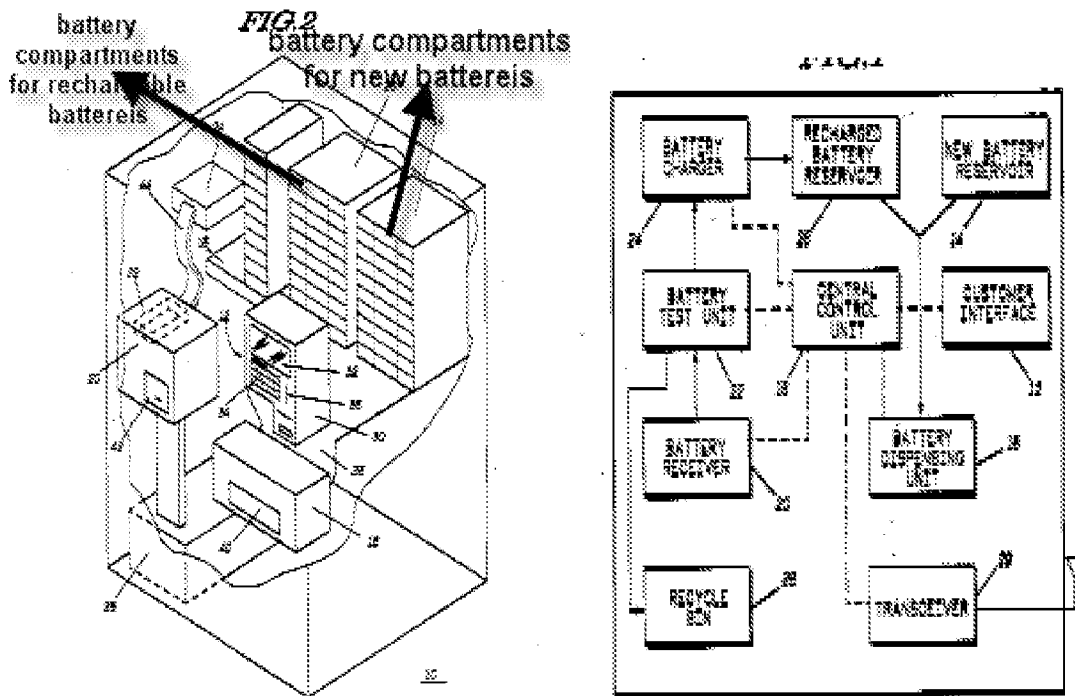
Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 6, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malaspina (US 5,544,784) in view of Eggert et. al. (US 6,262,559) (hereinafter Eggert)

As to claim 1, Malaspina discloses in figures 1,2 and 5, a battery recharging device for batteries (6) **[the vending machine is designed to charge rechargeable batteries and sell the recharged batteries and new batteries]**, and for the display of battery packs (5) at a point of sale **[both the rechargeable batteries (26) and the new batteries (14) are available for sale]**, said battery charging device comprising at least a supporting element (1, 17, 51) [see figure below]



which includes a series of housings (2, 18) [battery houses 14 and 26, see figure above] for the insertion and/or linking battery packs (5) [new battery and rechargeable battery reservoirs are designed to hold batteries and also link the rechargeable batteries electrically to the charger] at a point of sale, and means (20, 30) for the charging, recharging and/or maintenance of the electric charge, electrically connected to said housings (2,18), wherein said at least one supporting element (1, 17, 51) comprises automatic selection and supply means of at least one of said battery packs(5), driven by an electronic panel (50) [18] , when a selection is effected by a user by means (10, 11, 12, 32, 33, 34) [12] situated, on the outer casing (35) of the recharging device wherein said at least one supporting element (1, 17, 51) includes a series of columns (13, ha, 16, 20, 26, 37), inside which the battery packs (5) are introduced into appropriate slits (18) and kept in a horizontal position by means of shelves (15) [see figure above

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the plurality battery compartments] , wherein said electronic panel (50) selects at least one battery pack (5) containing the most highly charged batteries(6) of the type selected [noted that the user can select the new battery from the battery reservoir 14 which is highly charged or the rechargeable battery from reservoir 24 which has less energy]

Malaspina does not disclose explicitly, wherein each pack of batteries (5) of batteries (6) contains batteries, connected in series to each other, of which at least two terminals (7, 8, 80) are accessible from the outside of the pack of batteries (5) for connection to the recharging and/or maintenance means (20, 30) of an electric charger.

Eggert discloses in Figure1, wherein each pack of batteries **(33)** (5) of batteries (6) contains batteries, connected in series **(the batteries are connected in series, see figure 2, element 33)** to each other, of which at least two terminals (36 and 37) (7, 8, 80) are accessible from the outside of the pack of batteries (5) for connection to the recharging and/or maintenance means **(see figure 1, element 10)** (20, 30) of an electric charger

It would have been obvious to a person having ordinary skill in the art at the time of the invention to connect the plurality of batteries of Malaspina in series as taught by Eggert in order to maintain the charge in the batteries for extended period of time and provide higher voltage.

As to claim 2, Malaspina in combination with Eggert discloses at least one suitable housing for checking the charger level of the battery packs said suitable housing being adapted to be used for the temporary support of one of

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said battery packs [Malaspina discloses a battery test unit[22] that evaluates the received battery pack, see column 3, lines 3-10].

As to claim 6, Malaspina in combination with Eggert disclose characterized in that said two terminals (7, 8, 80) are situated at different distances, in order to be able to automatically select the necessary charge levels for the various types of batteries (6) to be charged [since batteries terminals are connected to the charger to be charged the charging terminals are providing appropriate power to the batteries].

As to claim 18, Malaspina discloses in figures 1-7, characterized in that said automatic selection and supply means comprise at least one motor (28) [94], whose rotation produces the moving of at least one pushing element (27) which causes the release of each battery packaging or pack (5) from the withholding elastic elements (29, 43[see figure 5 and column 5, lines 45-43].

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malaspina (US 5, 544,784) in view of in view of Eggert et. al. (US 6,262,559) (hereinafter Eggert), further in view of Inoue et. al. (US 5,744,933) (hereinafter Inoue).

As to claim 5, neither Malaspina nor Eggert discloses, characterized in that each of said housings or seats (2, 18) comprises signaling means, suitable for indicating the charge level and/or the arrival at the maximum charge level of the battery pack (5) inserted (see column 6, lines 33-36).

Inoue discloses in figures 1-18, characterized in that each of said housings or seats (2, 18) comprises signaling means [14], suitable for indicating

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the charge level and/or the arrival at the maximum charge level of the battery pack (5) inserted [see column 6, lines 33-36].

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to add battery charge indicating means for each battery housing in Malaspina's apparatus as taught by Inoue in order to aware the user (buyer) the status of lost and gained electric energy of the battery .

7. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malaspina (US 5,544,784) in view of in view of Eggert et. al. (US 6,262,559) (hereinafter Eggert), further in view of Offutt (US 3,653,540)

As to claim 14, neither Malaspina nor Eggert disclose at least one coil, which after the passage of an electric current, generates , generates an entrainment force of said pin (91) of the compression of said first elastic element (92), which produces the expulsion of the packaging (5) and the falling of said packaging (5) onto a collection surface (36).

Offutt disclose, in figures 1-4, at least one coil [138], which after the passage of an electric current, generates , generates an entrainment force of said pin (91) of the compression of said first elastic element (92), which produces the expulsion of the packaging (5) and the falling of said packaging (5) onto a collection surface (36) *[when the push button 34 depressed by the user the coil is energized and rotates the actuator and from which the user obtains the desired product from the machine]*.

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It would have been obvious to a person having ordinary skill in the art at the time of the invention to use coils in combination with manually activated push-button in the vending machine of Malaspina as taught by Offutt in order to provide force that speed up the dispensing process of the battery.

As to claim 15, Malaspina discloses, characterized in that said at least one supporting element (1, 17, 51) is electrically connected, by means of at least a second elastic element (96), with a body (94), associated with at least a third elastic element (95) and suitable for contacting at least one terminal (80) of the battery pack (5) for the charging of the batteries (6) contained therein [*noted that Malaspina discloses charging rechargeable batteries*].

As to claim 16, Malaspina in combination with Eggert disclose, characterized in that said battery packaging or pack (5) is made up of two symmetrical shells (23, 24) which mechanically withhold the batteries (6) and leave the relative terminals free, so that each battery (6) can be charged individually [see figure 3 of Eggert].

As to claim 17, Malaspina discloses, characterized in that said battery packagings or packs (5) are stacked on top of each other, in correspondence with each column (13, 14, 20, 16, 26, and 37) [the batteries of Malaspina are arranged in horizontal and vertical positions see figures 2 and 4, and also see column 6, lines 1-6].

8. Claims 7-9 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Malaspina in views of Eggert, and in view of Wang (US 5, 157, 318).

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As to claim 7, Wang discloses in Figures 1-5, a battery recharging device (6), characterized in that said at least one supporting element (21) comprises, in correspondence with each seat or housing (2, 18), at least one metallic body (23), pushed by at least a first conductor element (28), of the elastic type, which ensures the electric contact with said at least two terminals (7, 8, 80) of the battery pack (5), whereas at least a second conductor element (29) produces the electric contact with said recharging and/or maintenance means of the electric charge.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify charging means of charging bay of Malaspina and add a battery positioning means as taught by Wang in order to hold batteries in stable position during charging for secure charging process.

As to claim 8, Malaspina in combination with Eggert and Wang disclose, characterized in that at least one of said terminals (7, 8, 80) contacts at least one spring nail (38), in turn electrically connected to said recharging and/or maintenance means (20, 30) of the electric charge.

As to claim 9, Malaspina in combination with Eggert and Wang disclose, characterized in that said battery packaging or pack (5) is held in position by a notch of (42) of said at least one supporting element (1, 17, 51), which is engaged with an incision situated on the packaging (5).

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malaspina in view of Eggert, and in view of Flowerdew et. al. (US 7,211,986) (hereinafter Flowerdew)

As to claim 10, Flowerdew discloses in Figures 1 and 2, characterized in that said battery packaging or pack (battery pack of the device) has at least one guiding wing (the edges are guiding wings) for insertion inside said seats and/or housings (1) and is also equipped with at least one inductor element (316) and/or at least one rectifier diode (318), said at least one supporting element (1) comprising at least one magnetic circuit (310), with polar expansions, on which at least one coiling (312) is wound, so that, upon insertion of the packaging (5) in the respective seat and/or housing (1), said inductor element (312 and 314), inserted between said polar expansions of the magnetic circuit (316), forms an inductive magnetic coupling with said coiling , so as to transfer the electric energy, supplied by an alternating current generator and rectified by said diode, to the batteries of the packaging .

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify charging means of Malaspina's and add magnetic materials and coils in Malaspina's apparatus for inductively charging rechargeable batteries as taught by Flowerdew in order to avoid electrical leakage due to corrosion or poor electrical contacts between the batteries and the charger base.

10. Claims 19- 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malaspina (US 5,544,784) in view of in view of Eggert et. al. (US 6,262,559) (hereinafter Eggert), further in view of Yang [EP 0 693 813 A1].

Regarding claims 18,19 and 20, Malaspina and Eggert disclose the claim invention as claim 1 above, (see rejection above, 35 USC § 103 paragraph

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5), except wherein said automatic selection and supply means comprise at least one motor (28), whose rotation produces the moving of at least one pushing element (27) which causes the release of each battery pack (5) from the withholding elastic elements (29, 43) and said automate selection and expulsion means comprise at least one pushing element (27B), moved by at least one belt (26B), in turn activated by at least one motor (28B).

Yang disclose in figure 2, automatic selection [the sensor 28 senses and sends signal to the controller (1) and automatically selects battery] and supply means comprise at least one motor (28) [20], whose rotation produces the moving of at least one pushing element (27) [see figure 3] which causes the release of each battery pack (5) [battery pack is pushed to the out-slot] from the withholding elastic elements (29, 43) and said automate selection and expulsion means comprise at least one pushing element (27B) [253,251,252], moved by at least one belt (26B), in turn activated by at least one motor (28B).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to use combination of motor, belt and pushing elements for charging, displaying and dispensing batteries in Malaspina's apparatus as taught by Young in order to automatically rotate batteries and charge them during off-peak hours of power consumption and supplying or exchanging batteries at any time.

Response to Arguments

11. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection, or not persuasive.

Applicant argues that Malaspina does not disclose a point of sale battery charger having automatic selection and supply means wherein an electronic panel f(50) selects at least one battery pack that contains the most highly charge batteries on the display. This is incorrect.

Malaspina discloses battery vending machine to sale rechargeable batteries and new batteries. The interface [12] accepts user input and the controller [18] which is an electronic panel accepts the user input and provides charged or new battery. In the condition where the user selects new battery new battery is dispensed in doing so the vending machine provides the most highly charge battery to the user.

12. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., where the batteries having the highest degree of chare are identified to a prospective purchased in order to accommodate the restocking and recharging of batteries that have lost at least a part of their charge, at point of sale) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL BERHANU whose telephone number is (571)272-8430. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward Tso/
Primary Examiner, Art Unit 2858

/Samuel Berhanu/
Examiner, Art Unit 2858